

Appl. No. 10/763,873
Reply to Office Action dated 9/27/05
Amendment dated December 27, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended): An apparatus for manufacturing insulation, comprising:
a conveying means for conveying said insulation;
a rotary die cutting cylinder located along a path of the conveying means and having at least one cutting rule that severs said insulation and having at least one of the group consisting of a perfining rule or a slicing rule, and at least one cutting rule said slicing rule sized to partially cut through said insulation without cutting through a complete depth of said insulation; and
an anvil cooperative with said rotary die cutting cylinder for partially slicing, perforating or severing said insulation.
2. (Original): The apparatus of claim 1, wherein said conveying means comprises two adjacent conveyor belts.
3. (Original): The apparatus of claim 2, wherein the rotary die cutting cylinder and anvil are located intermediate the two conveyor belts.
4. (Original): The apparatus of claim 1, wherein the rotary die cutting cylinder includes three perfining or slicing rules and one cutting rule.
5. (Currently Amended): The apparatus of claim 1, wherein the rotary die cutting cylinder includes two cutting rules, and six perfining rules with steps along a length thereof ~~slicing rules and two cutting rules.~~
6. (Original): The apparatus of claim 1, wherein the rotary die cutting cylinder includes seven perfining or slicing rules and one cutting rule.
7. (Original): The apparatus of claim 1, wherein each perfining or slicing rule and cutting rule is approximately 17 or 25 inches in width.

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8. (Original): The apparatus of claim 1, wherein the perfining or slicing rules and at least one cutting rule are removable.
9. (Withdrawn): The apparatus of claim 1, wherein the rotary die cutting cylinder has a circumference of approximately fifty inches.
10. (Withdrawn): The apparatus of claim 9, wherein the rotary die cutting cylinder includes three perfining or slicing rules and one cutting rule, and wherein the rules are 12.5 inches apart along the circumference of the rotary die cutting cylinder.
11. (Original): The apparatus of claim 1, wherein the rotary die cutting cylinder has a circumference of approximately one hundred inches.
12. (Withdrawn): The apparatus of claim 11, wherein the rotary die cutting cylinder includes seven perfining or slicing rules and one cutting rule, and wherein the rules are 12.5 inches apart along the circumference of the rotary die cutting cylinder.
13. (Currently Amended): The apparatus of claim 11, wherein the rotary die cutting cylinder includes six perfining or slicing rules and two cutting rules, and wherein the rules are 12.5 inches apart along the circumference of the rotary die cutting cylinder, and wherein the rotary die cutting cylinder includes two sets of three consecutive perfining rules with cutting rules between the sets of perfining rules, the perfining rules having steps along lengths thereof.
14. (Original): The apparatus of claim 1, further comprising means for automatically tearing the plurality of separable segments apart.
15. (Original): The apparatus of claim 14, wherein the tearing means includes means for conveying a first and a second adjacent separable segments at different speeds to tear the first and second separable segments apart from each other.
16. (Original): The apparatus of claim 14, wherein the tearing means includes means for pinching and holding a first separable segment in a first direction and pinching and pulling forward a second separable segment adjacent the first separable segment in a second direction opposite the first direction.

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17. (Withdrawn): The apparatus of claim 14, wherein the tearing means includes means for restraining a first separable segment and pulling an adjacent second separable segment away from the first separable segment.

18. (Withdrawn): A method of manufacturing batts for insulating band joist spaces comprising:

providing a rotary die cutting cylinder having at least one perfining or slicing rule and at least one cutting rule;

conveying an insulation batt, roll or lane to the rotary die cutting cylinder; and
partially cutting the batt, roll or lane transversely with the rotary die cutting cylinder to form a plurality of separable segments sized for insulating band joist spaces.

19. (Withdrawn): The method of claim 18, further comprising completely severing the batt, roll or lane.

20. (Withdrawn): The method of claim 18, wherein the step of partially cutting comprises perforating the batt, roll or lane using a plurality of said perfining rules to form the plurality of separable segments.

21. (Withdrawn): The method of claim 18, wherein the step of partially cutting comprises transversely slicing the batt while leaving a horizontal connecting piece which connects the separable segments.

22. (Withdrawn): The method of claim 18, wherein the speed of rotation of the rotary die cutting cylinder is substantially synchronized with the speed of the insulation being conveyed to the rotary die cutting cylinder.

23. (Withdrawn): The method of claim 22, wherein the speed of the insulation being conveyed is between about 80 feet per minute to about 200 feet per minute.

24. (Withdrawn): The method of claim 18, further comprising automatically tearing the plurality of separable segments apart.

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25. (Withdrawn): The method of claim 24, wherein step (b) includes pinching and holding a first separable segment in a first direction and pulling forward a second separable segment adjacent the first separable segment in a second direction opposite the first direction.

26. (Withdrawn): The method of claim 24, wherein step (b) includes conveying a first and a second adjacent separable segments at different speeds to tear the first and second separable segments apart from each other.

27. (Withdrawn): The method of claim 24, wherein step (b) includes restraining a first separable segment and pulling an adjacent second separable segment away from the first separable segment.

28. (Previously Presented): The apparatus of claim 1, wherein the rotary die cutting cylinder is oriented relative to the conveying means so that the insulation is partially sliced, perforated or severed transversely.

29. (New): The apparatus of claim 1, wherein each perfining rule has steps along a length thereof